

CLAIMS

1. A digital dubbing device that compresses a digital signal for each predetermined compression process unit and stores compressed digital signal, the digital dubbing
5 device comprising:

a data count unit that counts minimum-unit data of the digital signal upon compression of the digital signal, and, based on index information on index of program data for the digital signal and the number of counts of the minimum-unit
10 data, detects a data stream of a predetermined number of minimum-unit data located in an end part of the compression process unit from the digital signal;

a data-stream storage unit that stores detected data stream of the predetermined number of minimum-unit data;

15 a data-stream comparator that detects a data stream corresponding to the data stream of the predetermined number of minimum-unit data from the digital signal when the storing of the digital signal is interrupted; and

a controller that, when the data stream comparator
20 detects a data stream corresponding to the data stream of the predetermined number of minimum-unit data from the digital signal, restarts the compression and storing of the digital signal from data next to detected data stream.

2. The digital dubbing device according to claim 1, further comprising a signal output unit that outputs the digital signal and the index information.

5 3. The digital dubbing device according to claim 1 or 2, wherein the data count unit detects the data stream of the predetermined number of data from all of compression process units.

10 4. The digital dubbing device according to claim 1 or 2, wherein the data count unit detects the data stream of the predetermined number of data from every predetermined number of compression process units.

15 5. The digital dubbing device according to claim 1 or 2, wherein the data count unit detects the data stream of the predetermined number of minimum-unit data from a compression process unit including an end part of the program data.

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6. The digital dubbing device according to claim 2, wherein the signal output unit further outputs subcode data which is time information for the program data, the digital dubbing device further comprising:

25 a frame detector that detects subcode data corresponding to the end part of the program data from the

digital signal, as a frame which is a minimum unit of the subcode data, based on the index information;

a frame storage unit that stores a frame detected by the frame detector as a boundary frame; and

5 a frame comparator that detects a frame identical to the boundary frame from the digital signal when the storing of the digital signal is interrupted, wherein

the data count unit detects the data stream of the predetermined number of minimum-unit data from program data
10 to be output after program data corresponding to the boundary frame.

7. The digital dubbing device according to claim 6, further comprising a compression-process-unit counter that
15 counts the number of compression process units of the digital signal after compression, wherein the frame detector determines a position to start detecting the boundary frame based on the number of compression process units counted by the compression-process-unit counter and
20 the index information.

8. The digital dubbing device according to claim 7, wherein

the detection of the boundary frame starts from a
25 position a predetermined number of frames before the boundary frame, and

when the storing is to be restarted, the signal output unit outputs the digital signal from a frame the predetermined number of frames before the boundary frame.

5 9. The digital dubbing device according to claim 7, wherein

the compression-process-unit counter detects a compression process unit after compression including the end part of the program data, based on the number of
10 compression process units counted by the compression-process-unit counter and the total number of compression process units counted from one of the program data by the data count unit, and

the controller causes the program data to be stored
15 for each program data based on the compression process unit after compression including the end part of the program data.